Amendments to the Claims:

Replace all prior versions and listings of claims in the application with the following list of claims.

1. (**currently amended**) A ~~**computer-implemented**~~ method **implemented on a computer** for pricing a financial derivative of a non-marketed variable x_e, the method comprising:

a) determining a market representative x_m useful in determining a value of the financial derivative;

b) retrieving **from a storage medium into memory of the computer** information associated with the non-marketed variable x_e and the market representative x_m;

c) calculating **on the computer** a solution to an equation involving a price of the financial derivative $V(x_e, t)$ defined as a function of x_e and time t, wherein the equation comprises a coefficient involving the information associated with x_e and x_m; and

d) generating **on the computer** an output including the calculated price of the financial derivative[[.]] **;**

wherein the information associated with x_e and x_m comprises a drift rate of the non-marketed variable x_e, and a drift rate of the market representative x_m;

wherein the information associated with x_e and x_m comprises variances of the non-marketed variable x_e and the market representative x_m, and a covariance between the non-marketed variable x_e and the market representative x_m;

wherein the coefficient involving the information associated with x_e and x_m has the form $\mu_e - \beta_{em}(\mu_m - r)$, where μ_e is a drift rate of the non-marketed variable x_e, μ_m is a drift rate of the market representative x_m, r is an interest rate, and β_{em} is a factor derived from a variance of the market representative x_m and a covariance between the non-marketed variable x_e and the market representative x_m;

wherein the market representative x_m comprises a marketed asset or combination of such assets that is approximately most correlated with the non-marketed variable x_e.

2. (**cancelled**).

3. (**cancelled**).

4. (**cancelled**).

5. (**cancelled**).

6. (**currently amended**) The method of claim **[[5]]** **1** wherein the **equation is an extended** ~~**modified**~~ Black-Scholes equation **[[is]]** obtained from a standard Black-Scholes equation by replacing, in a term involving a first-order partial derivative of $V(x_e, t)$ with respect to x_e, a coefficient r, representing an interest rate, by **[[a]]** **the** coefficient involving the information associated with x_e and x_m.

7. (**original**) The method of claim 1 wherein the equation is a discrete-time equation involving $V(x_e, t)$ defined as a function of x_e and discrete time points $t = k$.

8. (**cancelled**).

9. (**original**) The method of claim 1 wherein the market representative x_m comprises a combination of multiple marketed assets associated with market sectors most closely associated with the non-marketed variable x_e.

10. (**original**) The method of claim 1 wherein the market representative x_m comprises a marketed asset or combination of such assets that is approximately equal to an overall market portfolio.

11. (**original**) The method of claim 1 further comprising calculating an optimal hedge.

12. (**original**) The method of claim 1 further comprising calculating a minimum variance of the error between an optimal hedge and the calculated price of the financial derivative.

13. (**original**) The method of claim 1 wherein the equation represents a risk-neutral discounted expected value of cash flows of the financial derivative.

14. (**original**) The method of claim 13 wherein a cash flow of the financial derivative is path-dependent.

15. (**original**) The method of claim 1 applied to derivatives of a set of non-marketed variables wherein the market representative x_m comprises a combination of multiple marketed assets, each most-correlated with a different non-marketed variable in the set of non-marketed variables.

16. (**original**) The method of claim 1 wherein the calculated price of the financial derivative includes cash flows at an intermediate time and a terminal time.

17. (**original**) The method of claim 1 wherein drift rates, an interest rate, variances, and covariances of x_e and x_m either vary with time or are governed by stochastic processes.

18. (**original**) The method of claim 1 wherein the cash flow depends on marketed variables as well as non-marketed variables.

19. (**original**) The method of claim 1 wherein the equation involves additional non-marketed variables.

20. (**original**) The method of claim 1 wherein the market representative is derived from a combination of multiple marketed variables, and wherein x_e and the multiple marketed variables are governed by either geometric Brownian motion or alternative processes.

21. (**cancelled**).

22. (**cancelled**).

23. (**cancelled**).

24. (**cancelled**).

25. (**cancelled**).

26. (**cancelled**).

27. A method implemented on a computer for pricing a financial derivative of a non-marketed variable x_e, the method comprising:

a) retrieving from a storage medium into a memory of the computer information associated with a market representative x_m that is a marketed asset approximately most-correlated with the non-marketed variable x_e;

b) calculating on the computer a price of the financial derivative of the non-marketed variable x_e by numerical solution of an equation in which a term $\mu_e - \beta_{em}(\mu_m - r)$ is used in place of a standard drift rate μ_e in a risk-neutral version of a process governing x_m;

c) generating on the computer an output including the calculated price.

28. The method of claim 27 wherein calculating the price of the financial derivative comprises evaluating an expected value of the financial derivative.

29. The method of claim 27 wherein calculating the price of the financial derivative comprises solving an extended Black–Scholes equation containing the term $\mu_e - \beta_{em}(\mu_m - r)$.

30. The method of claim 27 further comprising calculating an optimal hedge of the financial derivative using the market representative x_m.

31. The method of claim 30 further comprising calculating a residual variance of the optimal hedge using the market asset approximately most-correlated with the non-marketed variable x_e.